

Department:	Obstetrics and Gynecology (Ward)		
Document:	Departmental Policy and Procedure		
Title:	Antibiotics Prophylaxis for Gynecological Procedures		
Applies To:	All Obstetrics and Gynaecology Staff		
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1. PURPOSE:

- 1.1 To ensure optimal use of prophylactic antibiotics in gynecological surgery.

2. DEFINITIONS:

- 2.1 **Pelvic Inflammatory Disease (PID)**- is an infection of the female reproductive organs. It usually occurs when sexually transmitted bacteria spread from your vagina to your uterus, fallopian tubes or ovaries.
- 2.2 **Hysterosalpingogram (HSG)** - is a procedure that uses an X-ray to look at your fallopian tubes and uterus.
- 2.3 **Intrauterine Device (IUD)** - also known as intrauterine contraceptive device (IUCD or ICD) or coil is a small, often T-shaped birth control device that is inserted into a woman's uterus to prevent pregnancy. IUDs are one form of long-acting reversible birth control (LARC).
- 2.4 **Sexually Transmitted Disease (STD)** - are infections that are passed from one person to another through sexual contact.

3. POLICY:

- 3.1 Single-dose intravenous antibiotic prophylaxis must be given.
 - 3.1.1 To patients undergoing abdominal hysterectomy and termination of pregnancy.
 - 3.1.2 Minutes before surgery or at the most with induction of anesthesia.
- 3.2 The type of antibiotic, dose and frequency of administration must be modified according to existence of co-morbidities.
- 3.3 Patient with history of anaphylaxis or urticaria or rash occurring immediately after penicillin must not receive prophylaxis with a betalactam antibiotic.
- 3.4 Patient with a history of severe anaphylactic reaction to penicillin must not receive cephalosporin.
- 3.5 Fluid replacement bags must be labelled "the name, dose of prophylactic antibiotics" because of the potential risk of contamination and calculation errors.
- 3.6 HSG must not be performed in patients thought to have an active pelvic infection.
- 3.7 If HSG demonstrates dilated fallopian tubes, antibiotic prophylaxis must be given to reduce the incidence of post HSG PID. Antibiotic prophylaxis must be used on individual risk of having PID. Routine use of antibiotic prophylaxis is not recommended.
- 3.8 Use of antibiotic prophylaxis with saline infusion ultrasonography must be based on clinical consideration, including individual risk factors.
- 3.9 Patients with underlying cardiac structural defects who are undergoing gynaecological procedures must receive prophylaxis antibiotics.

4. PROCEDURE:

- 4.1 Take full medical and obstetrical history to document cardiac conditions associated with endocarditis.

- 4.2 Second dose of antibiotics prophylaxis is not recommended unless:
 - 4.2.1 Blood loss \geq 1500ml.
 - 4.2.2 Prolonged procedure.
- 4.3 Antibiotic prophylaxis is not recommended in:
 - 4.3.1 Patient's undergoing diagnostic laparoscopy.
 - 4.3.2 The general patient population undergoing HSG, sonohysterography, and hysteroscopy.
 - 4.3.3 Women screened negative for STDs before IUD insertion.
 - 4.3.4 Endometrial biopsy.
 - 4.3.5 Before treatment of incomplete abortion.
 - 4.3.6 Bladder catheterization.
- 4.4 For antibiotic prophylactic regimen by procedure (see table).
- 4.5 For prophylactic regimens for prevention of endocarditis.

5. MATERIAL AND EQUIPMENT:

N/A

6. RESPONSIBILITIES:

- 6.1 Physician
- 6.2 Nurses
- 6.3 Pharmacist

7. APPENDICES:

- 7.1 Endocarditis Prophylaxis by Surgical Procedure
- 7.2 Cardiac Conditions associated with Endocarditis
- 7.3 Prophylactic Regimens for Prevention of Endocarditis in susceptible Patients Undergoing genitourinary or Gastrointestinal Procedures

8. REFERENCES:

- 8.1 Guidelines for Obstetrics and Gynecology/ Ministry of Health, General Directorate of Health Centers- Riyadh, 2013.

Table 1: Endocarditis Prophylaxis by Surgical Procedure

Endocarditis Prophylaxis Recommended	Endocarditis Prophylaxis Not Recommended
Gastrointestinal Tract <ul style="list-style-type: none"> Surgical operations that involved intestinal mucosa Genitourinary Tract <ul style="list-style-type: none"> Cystoscopy Urethral Dilation Other genitourinary procedures only in presence of infection 	Gastrointestinal Tract <ul style="list-style-type: none"> Vaginal Hysterectomy Urethral Catheterization Uterine dilatation and curettage Therapeutic abortion Sterilization procedures Insertion or removal of IUD

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Table 2: Cardiac Conditions associated with Endocarditis

Endocarditis prophylaxis Recommended	Endocarditis Prophylaxis Not Recommended
High-Risk Category <ul style="list-style-type: none"> Prosthetic cardiac valves, including bioprosthetic and homograft valves. Previous bacterial endocarditis Complex cyanotic congenital heart disease (e.g. single-ventricle states, transposition of the great arteries, tetralogy of Fallot) Surgically constructed systemic pulmonary shunts or conduits. Moderate- Risk Category <ul style="list-style-type: none"> Most other congenital cardiac malformations (other than those listed above and below) Acquired valve dysfunction (e.g. rheumatic heart disease) Hypertrophic cardiomyopathy Mitral valve prolapsed with valver regurgitation, thick-ended leaflets. 	Negligible-Risk category (Risk no greater than that of the general population) <ul style="list-style-type: none"> Isolated secundum atrial septal defect Surgical repair of ASD, VSD or patent ductusarteriosus (without residual beyond 6 months) Previous coronary artery bypasses graft surgery. Mitral valve prolapses without valver regurgitation. Physiologic, functional, or innocent heart murmurs. Previous Kawasaki syndrome without valver dysfunction. Previous rheumatic fever without valver dysfunction. Cardiac pacemakers (intravascular and epidural) and implanted defibrillators.

Table 3: Cardiac Conditions Associated with Endocarditis

Procedure	Antibiotic	Dose
Vaginal/ Abdominal Hysterectomy	Cefazolin or Cefoxitin or Metronidazole or Tinidazole	1 or 2 g single dose IV 2 g single dose IV 1 g single dose IV 2 g single oral dose (4-12 hours before surgery)
Laparoscopy	None	
Laparoscopy	None	
Hysterectomy	None	
Hysteroscopy	Doxycycline	100mg orally, twice daily for 5 days
IUD insertion	None	
Endometrial Biopsy	None	100mg orally 1 hour before procedure and 200 mg after procedure
Induced abortion/ D& C	Doxycycline	500mg orally twice daily for 5 days
Urodynamics	Metronidazole	
	None	

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Table 4: Prophylactic Regimens for Prevention of Endocarditis in susceptible Patients Undergoing genitourinary or Gastrointestinal Procedures

Situation	Agents	Regimen
High-risk patient	Ampicillin plus Gentamicin	Ampicillin, 2 g IM or IV, plus Gentamicin, 1.5 mg/kg (not exceeding 120mg) within 30 minutes of starting the procedure; after 6 hours, Ampicillin 1g IM/IV, or Amoxicillin, 1g orally
High-risk patients allergic to Ampicillin or Amoxicillin	Vancomycin plus Gentamicin	Vancomycin 1g IV over 12hours, plus Gentamicin, 1.5 mg/kg IV/IM (not to exceed 120mg) complete injection or infusion within 30 minutes of starting procedure
Moderate-risk patients	Amoxicillin or Ampicillin	Amoxicillin, 2g orally 1 hour, or Ampicillin, 1g IM/IV within 30 minutes of starting procedure
Moderate-risk patients allergic to Ampicillin or Amoxicillin	Vancomycin	Vancomycin 1g IV over 1-2 hours, complete infusion within 30 30 minutes of starting the procedure.

9. APPROVALS:

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